

AMENDMENTS TO THE ABSTRACT:

Please substitute the following newly written abstract for the originally submitted abstract of the disclosure.

Apparatus for indicating the departure of a shape of an object from a specified shape is described. The apparatus includes a light source for directing an incident beam of radiation onto the object, and an inspecting device for inspecting the final beam after transmission by or reflection from the object. The apparatus is arranged so that the final beam will have a substantially planar wavefront when the object has the specified shape, and said inspecting device is arranged to determine any departure of the wavefront of the final beam from planarity. In one embodiment, the inspecting device includes a beamsplitter, for example a diffraction grating or hologram, and a detector such as a CCD camera. The beamsplitter is then arranged to split the final beam into two or more beams and to direct the two or more beams to laterally displaced locations on the detector.